

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 93-044

NPDES PERMIT NO. CA0038351

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

COMMUNITY AT HARBOR BAY ISLE HOMEOWNER'S ASSOCIATION
BAY FARM ISLAND
ALAMEDA, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (the Board) finds that:

1. Community at Harbor Bay Isle Homeowner's Association (the discharger) submitted an application dated April 26, 1990 for reissuance of National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038351.
2. The discharger presently discharges an average of 9.5 million gallons per day (mgd) of lagoon water and surface drainage from land adjacent to the lagoon. Lagoon water containing pollutants would be discharged from the north lagoon structure into San Leandro Channel, a water of the State and the United States, at the northeast corner of the District's boundary line. During dry weather the lagoon water would consist primarily of water taken from a Bay water intake structure on the west shoreline of the discharger's property. During wet weather, the discharge would also contain storm water runoff.
3. The lagoon is normally flushed by natural tide cycles, which requires the manipulation of mechanical gates. Thus, the lagoon water has limited and controlled exchange with San Francisco Bay, and is therefore susceptible to dense growths of algae and aquatic weeds. Its discharge into San Francisco Bay constitutes a "discharge of pollutants" as defined in Section 502 of the Clean Water Act, as amended.
4. The discharger uses the herbicide simazine (Aquazine) to control growth of algae and aquatic weeds. Herbicides are used as spot treatment. The application of herbicides constitutes a discharge of pollutants.
5. The discharger's lagoon and its water control system are not considered to be a publicly owned treatment work (POTW). The discharger's lagoon and its water control system does not involve sewage collection, sewage treatment, or sewage discharge.

6. The discharger is presently subject to NPDES Permit No. CA0038351 (Order No. 85-35, adopted on April 30, 1985) which allows discharge into San Francisco Bay.
7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986, and the State Water Resources Control Board (SWRCB) approved it on May 21, 1987. The Board adopted a revised Basin Plan on September 16, 1992. It has not yet been approved by SWRCB. The Basin Plan contains a listing of beneficial uses of Lower San Francisco Bay and San Lorenzo Creek and contiguous water bodies.
8. The Basin Plan contains water quality objectives for San Francisco Bay and contiguous waters. The beneficial uses of San Francisco Bay and contiguous waters are:
 - Water contact recreation
 - Non-contact water recreation
 - Wildlife habitat
 - Preservation of Rare and Endangered Species
 - Estuarine Habitat
 - Fish migration and spawning
 - Industrial service and process supply
 - Shellfish harvesting
 - Navigation
 - Commercial and Sport Fishing
9. The beneficial uses of Harbor Bay Isle Lagoon are:
 - Non-contact water recreation
 - Wildlife Habitat
 - Estuarine Habitat
 - Fish migration and spawning
 - Commercial and Sport Fishing
10. The Basin Plan prohibits the application of biocides which have particular characteristics of concern to beneficial uses when applied where direct or indirect discharge of water is threatened except where net environmental benefit can be demonstrated to the satisfaction of the Board. The Basin Plan also requires that a lagoon management plan (LMP) for the use and control of biocides be approved by the Board. It appears that a net environmental benefit will result from biocide application.
11. A LMP is intended to detail lagoon management practices which will minimize the use of persistent and/or cumulative biocides (thereby minimizing the toxic effects of these substances on the aquatic biota), specifying which biocides should be used, what lagoon conditions indicate their use is necessary, and what techniques will be used in their

application. The discharger submitted a revised LMP, dated September 15, 1992.

12. This order serves as an NPDES Permit, revision of which is exempt from the provisions of Chapter 3 (commencing with Section 21100 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
13. The discharger and interested agencies and persons have been notified of the Board's intent to revise the NPDES permit for this discharge and have been provided an opportunity to submit their written comments and appear at the public hearing.
14. The Board at a properly-noticed public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of any sewage or industrial waste other than urban stormwater or landscape watering runoff is prohibited.
2. The collection, containment and/or discharge of lagoon water shall not cause nuisance or pollution as defined in the California Water Code.
3. Application of persistent or cumulative biocides is prohibited unless the application of biocides is done consistent with a lagoon management plan approved by the Executive Officer.

B. Effluent Limitations

1. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

C. Receiving Water Limitations - Bay Farm Island Lagoon

1. The discharger shall maintain the following limits of water quality in the lagoon:

- a. Chlorophyll 'a' - less than 50 $\mu\text{g/l}$ increase above the influent concentration;
 - b. Dissolved oxygen within one foot of the lagoon's surface - 5.0 mg/l, minimum;
 - c. The moving median value for the Most Probable Number (MPN) of total coliform in any five consecutive effluent samples shall not exceed 240 coliform organisms per 100 milliliters of sample. Any single sample shall not exceed 1000 MPN/100 ml.
2. The following conditions at any point in the lagoon are prohibited:
- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - c. Aquatic growths in quantities sufficient to create nuisance condition as defined in the California Water Code;
 - d. Significant increase in apparent color beyond natural background levels;
 - e. Increase turbidity above influent levels by more than the following:

<u>Influent Background Level</u>	<u>Incremental Increase</u>
<50 units (NTU)	5 units, maximum
50 - 100 units (NTU)	10 units, maximum
>100 units (NTU)	10% of background, maximum

- f. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

D. Receiving Water Limitations - General

1. The discharge of lagoon water shall not cause the

following conditions to exist in waters of the State at any place:

- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
- b. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- c. Aquatic growths in quantities sufficient to create nuisance condition as defined in the California Water Code;
- d. Significant increase in apparent color beyond natural background levels;
- e. Increase turbidity above influent levels by more than the following:

<u>Influent Background Level</u>	<u>Incremental Increase</u>
<50 units (NTU)	5 units, maximum
50 - 100 units (NTU)	10 units, maximum
>100 units (NTU)	10% of background, maximum

- f. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharger shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

E. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 85-35. Order No. 85-35 is hereby rescinded.

2. The discharger shall comply with all sections of this Order immediately upon adoption.
3. Any LMP amendment, including changes in the type or amount of biocides being applied to the lagoon or changes in timing, nature, or manner of application, will require the written approval of the Executive Officer. The Executive Officer shall not approve any amendment to the LMP unless it has been demonstrated to the satisfaction of the Executive Officer that the effects of the modified biocide application procedures are consistent with the Basin Plan.
4. The discharger shall operate, control and maintain the lagoon in accordance with the requirements of this Order and the LMP.
5. The discharger shall review and update its final LMP annually, or in the event of significant lagoon operational and/or maintenance changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Regional Board by April 15 of each year.
6. The discharger shall comply with the attached self-monitoring program. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63)
7. The discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements" dated December, 1986, except for the following paragraphs: A.9., A.12., A.18., B.3., C.8., and C.11..
8. The discharger shall submit by February 1 each year a list of all of the biocides used in the lagoon for the prior year, including the amount and location of application.
9. This Order Expires on February 17, 1998. The discharger must file a report of Waste Discharge in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
10. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption

provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on May 19, 1993.

A handwritten signature in black ink, appearing to read 'S. Ritchie', with a long horizontal line extending to the left.

STEVEN R. RITCHIE
Executive Officer

Attachments:

Standard Provisions & Reporting
Requirements, December 1986
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

COMMUNITY AT HARBOR BAY ISLE HOMEOWNER'S ASSOCIATION

HARBOR BAY ISLE

ALAMEDA, ALAMEDA COUNTY

NPDES NO. CA0038351

ORDER NO. 93-044

CONSISTS OF

PART A, dated December 1986

AND

PART B

PART B

COMMUNITY AT HARBOR BAY ISLE HOMEOWNER'S ASSOCIATION

I. DESCRIPTION OF SAMPLING STATIONS

A. LAGOON WATER

<u>Station</u>	<u>Description</u>
LG-1 and LG-2	At the midpoints of the lagoon's width near Crane Court and Stone Harbor respectively in the lagoon as shown in the attached sketch entitled "Bay Farm Island Lagoon Sampling Stations".

B. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in San Leandro Channel, located approximately 25 feet north of the point at which waste is discharged.

II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

- A. The schedule of sampling, measurements, and analysis shall be that given as Table 1. Grab samples shall be collected during periods of maximum peak flows.

III. MODIFICATIONS OF PART "A" DATED DECEMBER 1986

- A. Does not include the following paragraphs of Part A:
D.1., D.2.a., D.2.c., D.2.d., D.2.f., D.2.g., D.2.h.,
D.3., D.4.a., D.5., E.3., E.4., E.5., F.1.c., F.1.d.,
F.3., and F.5.b.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in the Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Board Order No. 93-044.

2. Is effective on the date shown below.
3. May be revised at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.



STEVEN R. RITCHIE
Executive Officer

5/19/93

Effective Date

Attachments:

Table I
Part A (December 1986)
Map - Sampling Stations

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS
COMMUNITY AT HARBOR BAY ISLE HOMEOWNER'S ASSOCIATION
NPDES NO. CA0038351

SAMPLING STATION	LG-1 (1)	LG-2 (1)	C-1 (2)
TYPE OF SAMPLE	G	G	G
Flow Rate (mgd)	D	D	D
Dissolved Oxygen (3) (mg/l)	W	W	
pH (3) (units)	2W/M	2W/M	
Total Coliform (MPN/100 ml per req't.)	M	M	
Temperature (C)	2W/M	2W/M	
Turbidity (3) (Turbidity Units)	W	W	2W/M
All applicable Standard Observations	2W/M	2W/M	2W/M

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample

TYPES OF STATIONS

LG = lagoon stations

C = receiving water stations

FREQUENCY OF SAMPLING

D = once each day

W = once each week

2W = every two weeks

2W/M = every two weeks May 1 through September 30
monthly October 1 through April 30

FOOTNOTES:

- (1) Samples of lagoon water shall be collected on days coincident with sampling of lagoon water
- (2) To be sampled while discharge from the lagoon is occurring
- (3) Duplicate samples to be analysed once every quarter by a laboratory certified by the State Department of Health Services

The image is a detailed site plan of the Harbor Bay area, showing various residential developments and landmarks. The plan includes labels for Harbor Bay Club, Centre Court, Amelia Earhart School K-5, Harbor Bay Landing, Harbor Bay Realty, Community Center, Library, City Park, Baywood Village, Costa Brava, Woodbridge, Pelican Bay, and Village 5. It also shows the Alameda Municipal Golf Complex and the Alameda Municipal Golf Course. The plan is oriented with North at the top. Handwritten labels 'C-1' and 'Lgr-1' are present, along with a 'Flow' arrow pointing towards the bottom right.

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

BAY FARM ISLAND
LAGOON SAMPLING STATIONS

DRAWN BY: VBP	DATE: 1/8/93	DRWG. NO.
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